



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE	N0054
PRODUCT NAME	NAT. GERANYL FORMATE
SUPPLIER	Shanghai M & U International Trade Co., Ltd. Rm 1717, No 598 North NuJiang Road 200333 Shanghai, China +86-21-32515501 32515502 sales@mu-intel.com

FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)

2. HAZARD IDENTIFICATION:

Emergency Overview

OSHA Hazards

No known OSHA hazards.

GHS Classification

Skin irritation (Category 3)

Eye irritation (Category 2B)

GHS Label elements, including precautionary statements

Pictogram none

Signal word Warning

Hazard statement(s)

H316 Causes mild skin irritation

H320 Causes eye irritation

Precautionary statement(s)

P305 P351 P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification

Health hazard 0

Flammability 1

Physical hazards 0

NFPA Rating

Health hazard 0

Fire 1

Reactivity Hazard 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation..

Eyes May cause eye irritation.

Ingestion May be harmful if swallowed.

3. COMPOSITION AND INFORMATION ON INGREDIENTS:

Formula C11 H18 O2
Molecular Weight 182.26 g/mol

CAS-No	EC-No	Index-No.	Concentration
105-86-2	203-339-4		

4. FIRST-AID GUIDE:

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING GUIDE:

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

6. ACCIDENTAL RELEASE GUIDE:

Personal precautions

Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE:

Precautions for safe handling

Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE AND PERSONAL PROTECTION:

Contains no substances with occupational exposure limit values.

Personal protective equipment:

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NOISH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NOISH (US) or EN (EU).

Skin and body protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

General industrial hygiene practice

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance

Form	LIQUID
Color	COLORLESS TO PALE YELLOW

Safety data

pH	no data available
Melting point (°C)	no data available
Boiling point (°C)	216
Flash point (°F) Closed cup	>200
Vapor pressure (mmHg@20°C)	no data available
Density @25 °C	0.915
Water solubility	no data available
Relative vapor density	>1
Odor	FRESH, LEAFY, ROSE

10. STABILITY AND REACTIVITY:

Chemical stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. TOXICOLOGICAL INFORMATION:

Acute toxicity

Oral LD50

rat - >6,000 mg/kg

Skin corrosion/irritation

Skin - Human - Mild skin irritation - 48 h

Serious eye damage/eye irritation

Eyes - rabbit - Mild eye irritation - 24 h

Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Additional Information

RTECS: RG5925700

12. DISPOSAL RECOMMENDATIONS:

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

13. TRANSPORTATION INFORMATION:

DOT (US)

Not dangerous goods.

IMDG

Not dangerous goods.

IATA

Not dangerous goods.

14. REGULATORY INFORMATION:

OSHA Hazards

No known OSHA hazards.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Geranyl Formate	105-86-2	

New Jersey Right To Know Components

	CAS-No.	Revision Date
Geranyl Formate	105-86-2	

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

15. OTHER INFORMATION:

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.